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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,458	01/23/2001	Hirofaka Hosokawa	F-6847	2128
7590 11/04/2004 JORDAN AND HAMBURG LLP 122 East 42nd Street New York, NY 10168			EXAMINER COBURN, CORBETT B	
			ART UNIT 3714	PAPER NUMBER

DATE MAILED: 11/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/767,458

Applicant(s)

HOSOKAWA, HIROTAKA

Examiner

Corbett B. Coburn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3, 8-11, 16-19 and 24-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8-11, 16-19 and 24-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 8-11, 16-19 & 24-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Susman (US Patent Number 5,261,041) in view of Allison (US Patent Number 3,809,395).

**Claims 1, 9 & 17:** Susman teaches a video game device (Col 26, 54) for displaying a play character on a game screen displayed on a monitor (105). Susman teaches an operation member (i.e., mouse – Col 26, 56) for moving the play character from a reference position to a predetermined position in a game space. (Col 26, 54-Col 27, 3) There is a storage unit (104) for storing a first image data group including a predetermined number of frames of image data for displaying a first action relating to the moving action of the play character and a second image data group including a plurality of frames of image data for displaying a second action different from the first action. (Keyframes, Col 19, 46-60) There is a display control unit (101) for reading the first and second image data groups from the storage unit and displaying the action of the play character based on the read frames of image data. The display control unit is arranged to consecutively display the frames of image data at a constant time interval. (Figs 3 & 4) The controller (101)

also acts as a switch control unit for switching the first image data group to the second image data group such that the first action and the second action are smoothly successively displayed without any discontinuity when the play character reaches the predetermined position by repeatedly displaying the first action. (Col 8, 5-42 & Col 19, 46-60) The display control unit is coupled to the operation member and arranged to sequentially display an image corresponding to each of the predetermined number of frames stored in the storage unit when the operation member is not operated – when the image is not being moved, the same image is repeatedly displayed. This is inherent in frame animation techniques. When the operation member is being operated (i.e., when the image is being moved), the display control unit is arranged to generate new image data for a new frame to be created between successive frames stored in the storage unit (i.e., keyframes) by interpolation between the successive frames based on the operation of the operation member and then to display the newly generated image data. (Col 19, 46-60) This is called “inbetweening” and is notoriously well known to the art.

Susman fails to teach that the moving action of the play character is displayed when the operation member is not operated during the movement of the play character from the reference position to the predetermined position. Many game programs display moving action of the play character when the operation member is not operated. Virtually all games involving vehicles have this characteristic – the user points the vehicle in a particular direction and it goes in that direction until the user activates the controls again. Vehicle games are very popular. Target games in which the player controls the action of a projectile are also very popular and have the same characteristics

as the vehicle games (i.e., the projectile moves in an initial direction unless the player operates the operation member). The Patent Office has entire subclasses dedicated to these types of games. Allison discloses a vehicle/target game in which the moving action of the play character (the missile) is displayed when the operation member is not operated. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Susman to implement Allison's game in order to take advantage of the tremendous popularity of vehicle/target games.

**Claims 2, 10 & 18:** A specified frame of image data of the first image data group (the first keyframe) is to a frame of image data of the second image data relating the specified frame (the second keyframe) when the character reaches the predetermined position.

(Col 19, 46-60)

**Claims 3, 11 & 19:** Each keyframe is a single frame. Therefore, the specified frame is inherently the last frame of the first image data group and the frame of the second image data group relating to the specified frame is the first frame thereof.

**Claims 8, 16 & 24:** The moving speed of the play character displayed on the monitor by the first action varies according to the operated amount of the operation member – i.e., the more the player moves the mouse, the farther the object moves on the screen. The unit moved amount of the character by the first action (defined as a distance of the movement of the play character in the plurality of frames of image data for the first action) is set at a constant value regardless of the moving speed of the play character and the distance of the predetermined position from the reference position is a multiple of the unit moved amount. (Fig 4)

**Claim 25:** The operation of the operation member is multiplied by a predetermined coefficient set for the game to obtain a delta animation value, the display control unit being arranged to generate the new image data for the new frame to be created between successive frames stored in the storage unit by interpolation between the successive frames based on the delta animation value. (Col 21, 25-28)

**Claims 26, 27 & 28:** Susman describes a slow motion animation in which the number of frames displayed in a predetermined time is reduced. (Col 7, 50-54) The player would necessarily have to operate an operation member (i.e., a slow motion button) in order to put the device into slow motion mode.

**Claim 29:** Claim 29 is a combination of claims 1 & 8. See the rejection above. While the player character in Susman and Allison are not depicted as human, the graphical depiction is merely a matter of design choice for which no stated problem is solved and no unexpected result is obtained. The arrangement of pixels on a computer screen is purely a matter of aesthetics.

**Claim 30:** Claim 30 is a combination of claims 9 & 16. See the rejection above. While the player character in Susman and Allison are not depicted as human, the graphical depiction is merely a matter of design choice for which no stated problem is solved and no unexpected result is obtained. The arrangement of pixels on a computer screen is purely a matter of aesthetics.

**Claim 31:** Claim 31 is a combination of claims 17 & 24. See the rejection above. While the player character in Susman and Allison are not depicted as human, the graphical depiction is merely a matter of design choice for which no stated problem is solved and

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no unexpected result is obtained. The arrangement of pixels on a computer screen is purely a matter of aesthetics.

3. Claims 32-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Susman & Allison as applied to claims 1, 9, 17, 29, 30 or 31 above, and further in view of Hannai (US Patent Number 5,816,920).

**Claims 32-37:** Susman & Allison teach the invention substantially as claimed. Allison teaches a vehicle game in which a vehicle (the missile) is steered toward a target (essentially a finish line). It takes one set of actions prior to reaching the target and another when it reaches the target. Allison is not, however, a race game – though the concepts are the same. Hannai teaches a race game. Race games are extremely popular. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the games of Susman and Allison in view of Hannai to depict a race game in order to take advantage of the popularity of race games. As pointed out above, the arrangement of pixels on a computer screen is purely a matter of aesthetics. Therefore, the depiction of a human player character versus a vehicular character player is not patentably distinct.

#### ***Response to Arguments***

4. Applicant's arguments filed 28 Jun 04 have been fully considered but they are not persuasive.
5. Applicant argues that Allison does not teach a moving vehicle controlled by the player. The missile (19) is a moving vehicle controlled by a player.

6. Applicant argues that the vehicle does not have two different types of moving actions. This is incorrect. Moving at a 45 °angle is a different movement than moving at a 30° angle. Furthermore, the missile has different movements when it hits the target – it explodes.
7. Applicant argues that there is no action represented by a plurality of frames that is repeatedly displayed. This is incorrect. For example, if the missile is launched at a 45 °angle, a plurality of frames of the missile at a 45 °angle are displayed until the player operates the controls to change the missile to a 30° angle – at which time a plurality of frames with the missile at a 30° angle are displayed.
8. Applicant argues that Allison does not teach play characters that are human. This is dealt with in the rejection above.
9. Applicant's arguments concerning the speed of the character are answered above.

### *Conclusion*

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,



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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

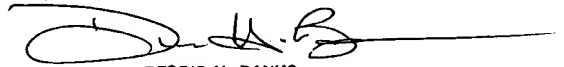
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Corbett B. Coburn whose telephone number is (703) 305-3319. The examiner can normally be reached on 8-5:30, Monday-Friday, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (703) 308-1745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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